

**Notice of Allowability**

Application No.

10/616,085

Applicant(s)

JAYARAMAN ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 11 January 2006.
2. ☒ The allowed claim(s) is/are 19-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                             |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>106</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                     |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                    |
|   | 9. <input type="checkbox"/> Other _____   |

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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Carrie A. Beatus on January 25, 2006.

The application has been amended as follows:

Specification, page 10, paragraph 22; page 11, paragraphs 23, 24, 25 and 26, line 2; and page 12, paragraph 28, line 2 and paragraph 29, lines 2-3:

Amend "bis F resin" to --bisphenol F epoxy resin--.

Claim 19, line 10, replace "a" with --an epoxy--.

The following is an examiner's statement of reasons for allowance:

2. The 35 U.S.C. 112, first paragraph, rejection is resolved by the citation of page 6, paragraph 13, line 3 as the basis for the carboxylic acids for R of the structural formula for the first (bridged) cyclohexane maleic anhydride polymer. The amendment of claim 19 to denote styrene/maleic anhydride polymers and the correction of its structure on page 8, Scheme 6 properly describes and enables it.
3. The limitation of R for the structural formula of the second norbornene maleic anhydride polymer to exclude esters overcomes the 35 U.S.C. 103(a) rejection wherein Japanese Patent No. 2001-139669 relied upon to teach norbornene-maleic anhydride copolymer curing agents.


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Formula 4 for the norbornene-maleic anhydride copolymer of the Japanese patent contains a norbornene moiety wherein  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  is a hydrogen atom, alkyl group, aryl group or  $COOR^5$  wherein  $R^5$  is an alkyl or aryl group (page 1, paragraphs 6 and 7). The limitation of R in the claimed structural formula for the second norbornene maleic anhydride copolymer (i.e.  $n = 1$ ) to ethers, lactones, anhydrides, alcohols, nitriles, epoxy or carboxylic acids precludes the ester  $COOR^5$  of the Japanese patent. There is no motivation to modify an R group of the norbornene-maleic anhydride copolymer of the Japanese patent to incorporate the claimed functional groups.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



Robert Sellers  
Primary Examiner  
Art Unit 1712